



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/660,167	09/11/2003	Paul Reuben Day	ROC920030144US1	7591
30206	7590	10/25/2007		
IBM CORPORATION ROCHESTER IP LAW DEPT. 917 3605 HIGHWAY 52 NORTH ROCHESTER, MN 55901-7829			EXAMINER PHAM, MICHAEL	
			ART UNIT 2167	PAPER NUMBER
			MAIL DATE 10/25/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Interview Summary

Application No.

10/660,167

Applicant(s)

DAY ET AL.

Examiner

Michael D. Pham *M.P.*

Art Unit

2167

All participants (applicant, applicant's representative, PTO personnel):

(1) Michael D. Pham.

(3) Scott A. Stinebruner (reg. 38,323).

(2) Cam Y Truong.

(4) \_\_\_\_\_.

Date of Interview: 18 October 2007.

Type: a) ☒ Telephonic b) ☐ Video Conference  
c) ☐ Personal [copy given to: 1) ☐ applicant 2) ☐ applicant's representative]

Exhibit shown or demonstration conducted: d) ☐ Yes e) ☐ No.  
If Yes, brief description: \_\_\_\_\_.

Claim(s) discussed: 7.

Identification of prior art discussed: Ozbutun and Thai.

Agreement with respect to the claims f) ☐ was reached. g) ☐ was not reached. h) ☒ N/A.

Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: See Continuation Sheet.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN A NON-EXTENDABLE PERIOD OF THE LONGER OF ONE MONTH OR THIRTY DAYS FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.

Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.

*Cam Y Truong*  
Examiner's signature, if required

Continuation of Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: Applicant's representative explained the invention with respect to the claims. The examiners discussed the prior art in respect to the agenda. It was suggested to further define primary task with respect to figure 3. Examiners' further suggested to clarify the claims in respect to the arguments presented in the agenda such as further clarify "background task that is associated with the same query"; and to incorporate claim 12. Examiners will further review the case for allowance, pending any remaining issues, such as 35 U.S.C. 112, when a formal response is submitted.

**WOOD, HERRON & EVANS, L.L.P.**

BRUCE TITTEL  
DAVID S. STALLARD  
J. ROBERT CHAMBERS  
GREGORY J. LUNN  
KURT L. GROSSMAN  
CLEMENT H. JUKEN, JR.  
THOMAS J. BURGER  
GREGORY F. AHRENS  
WAYNE I. JACOBS  
KURT A. SUMME  
KEVIN G. ROONEY  
KEITH R. HAUPT  
THEODORE R. REMAKLUS  
THOMAS W. HUMPHREY  
SCOTT A. STINEBRUNER  
DAVID H. BRINKMAN  
DEVERLY A. LYMAN, PH.D.  
KRISTIN L. DAVIDSON  
KATHRYN E. SMITH  
P. ANDREW BLATT, PH.D.  
DAVID E. JEFFERIES  
J. DWIGHT POFFENBERGER, JR.  
WILLIAM R. ALLEN, PH.D.

2700 CAREW TOWER  
441 VINE STREET  
CINCINNATI, OHIO 45202-2917  
TELEPHONE: 513-241-2324  
FACSIMILE: 513-241-6234  
WEBSITE: www.whepatent.com

PATENT, TRADEMARK, COPYRIGHT  
AND UNFAIR COMPETITION LAW  
AND RELATED LITIGATION

HARMUND P. WOOD 1923-1988  
TRUMAN A. HERRON 1935-1976  
EDWARD B. EVANS 1936-1971

JOSEPH R. JOHNSON  
C. RICHARD EBY

JOHN PAUL DAVIS  
DOUGLAS A. SCHOLER  
BRETT A. SCHATZ  
DAVID W. DORION  
SARAH OTTE GRAHR  
STEVEN W. BENINTENDI, PH.D.  
RANDALL S. JACKSON, JR.  
ADAM R. WEEKS  
CHARLES K. HIGER, JR.  
KEVIN F. KUEHN  
PATENT AGENTS  
ANA C. JACQUEZ  
MICHAEL H. SCHENKER

OF COUNSEL  
JOHN D. POFFENBERGER  
DAVID J. JOSEPHIC  
DONALD F. FREI  
THOMAS W. FLYNN  
BRADLEY D. BECK

October 11, 2007

**FACSIMILE COVER SHEET**

To: Examiner Michael Pham  
Art Unit 2167  
The United States Patent and Trademark  
Office

Fax: 571-273-3924

**Enclosures:**

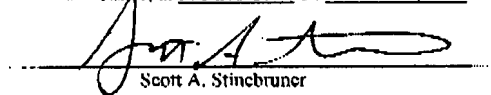
Fax Cover Sheet containing Certificate of  
Facsimile Transmission (1 page)  
Agenda and Proposed Amendments  
(1 page)

From: Scott A. Stinebruner

Re: Application No. 10/660,167  
Filed: September 11, 2003  
Applicant: Paul Reuben Day et al.  
Confirmation No. 7591  
Attorney Docket No. ROC920030144US1  
Our File: IBM/256  
Pages: 2 (including cover sheet)

**MESSAGE/COMMENTS****Interview Agenda attached.****CERTIFICATE OF FACSIMILE TRANSMISSION**

I hereby certify that this correspondence and the enclosures noted herein (2 total pages, including cover sheet) are being transmitted via facsimile transmission to Examiner Michael Pham, The United States Patent and Trademark Office, at 571-273-3924 on October 11, 2007.

  
Scott A. Stinebruner

10/11/07  
Date

The information in this facsimile message is ATTORNEY-CLIENT PRIVILEGED, WORK PRODUCT and/or CONFIDENTIAL INFORMATION intended only for the use of the individual or entity to whom this message is addressed. If the reader of this message is not the intended recipient or the employee or agent responsible for delivering it to the intended recipient, you are hereby notified that any dissemination, distribution or reproduction of this communication is strictly prohibited. If you have received this communication in error, please immediately notify us by telephone and return the original message to us at the above address via mail. Thank you. If transmission is interrupted or of poor quality, please notify us immediately by calling (513) 241-2324 and ask for the sender's assistant. OUR FAX NUMBER IS (513) 241-6234.

Interview Agenda

10/660,167

§103 rejection

Claim 7 runs a first, primary task and a second, background task that run concurrently and are associated with the same query. The primary task retrieves records from storage using a bitmap that has been initialized to all active values. The background task updates the bitmap by setting values inactive for records that are determined from an index to not correspond to a selection criteria.

Examiner admits Thai does not disclose (1) running a background task associated with the same query concurrently with a primary task; (2) scanning a column of a table using an index and determining records not satisfying portion of selection criteria. Instead, Examiner relies on new reference to Ozbutun.

Ozbutun does not disclose a background task for updating/building a bitmap, where the background task is associated with the same query as the primary task.

Ozbutun discloses transactions that concurrently access different segments of a bitmap to update the bitmap; however, these transactions are not associated with the same query as the primary task. The transactions perform updates to correspond to changes made to the underlying table data, not to build the bitmap. (col. 6, lines 29-45).

Examiner asserts tasks are “associated with same query” because “queries are for the same bitmap.” This is incorrect. Bitmaps are associated with columns of data, not queries. Completely different queries can use the same bitmap.

Ozbutun does not disclose updating a bitmap responsive to scanning a column of a table using an index built over the column.

Ozbutun discloses transactions that update a bitmap responsive to changes made to the underlying table data, not by scanning an index. (col. 6, lines 29-45).

Ozbutun discloses the bitmaps as being “bitmap indexes;” however, claim 7 requires a bitmap and an index, and there is no disclosure that an index is accessed when determining whether to update a bitmap.

Thai also teaches away, since col. 9, line 63 to col. 10, line 4 teaches that (1) a bitmap is built only when no index exists, and (2) the avoidance of accessing records only occurs on “subsequent query operations performed for the expression.” Ozbutun also does not suggest any progressive building of a bitmap concurrently with using the bitmap to process a query.